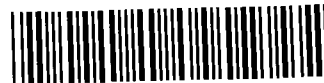


US EPA RECORDS CENTER REGION 5



466241

FIELD OVERSIGHT SUMMARY REPORT  
ACS NPL SITE  
GRIFFITH, INDIANA

JUNE 7, 1999 - JUNE 15, 1999



BLACK & VEATCH  
SPECIAL PROJECTS CORP.

101 North Wacker Drive, Suite 1100, Chicago, Illinois 60606, (312) 346-3775

U.S.EPA  
American Chemical Service Inc.

BVSPC Project 46518  
BVSPC File C.3  
June 18, 1999

Mr. Kevin Adler  
Remedial Project Manager  
U.S. Environmental Protection Agency  
Region V, SR-J6  
77 West Jackson Boulevard  
Chicago, IL 60604-3590

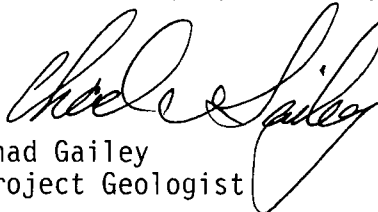
Subject: Field Summary Report

Dear Mr. Adler:

Enclosed is a copy of the quarterly groundwater sampling field oversight summary report for your review. Quarterly sampling took place during the week of June 7, 1999, at the American Chemical Services Superfund site in Griffith, Indiana. Please call me at 312/683-7857 if you have any questions.

Sincerely,

BLACK & VEATCH SPECIAL PROJECTS CORP.

  
Chad Gailey  
Project Geologist

ctg  
Enclosures

cc: S. Mrkvicka, BVSPC w/enclosures

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## USEPA/ARCS V BVSPC Oversight Summary

Reporting Period June 7 to 15, 1999      Hours Worked: 73  
Site Name/Location: ACS/Griffith, IN      BVSPC Project No.: 46518.238  
USEPA Work Assignment Manager: Kevin Adler, RPM  
Site Manager: Steve Mrkvicka

Personnel Summary Affiliation	No. of Personnel	Responsibility
Lee Orsorz, Montgomery Watson, Addison, IL	1	Respondent's General Contractor
Jennifer Smith, Judith Kinch, Rob Adams, Scott Sherman, Trisha Woolslayer, Satjad Ansari, and Dawn Daugher, Montgomery-Watson, Addison, IL	7	Field Sampling Crew (for quarterly groundwater sampling)
Chad Gailey, Black & Veatch Special Projects Corp, (BVSPC)	1	USEPA Oversight Contractor

### Summary of field activities:

During the week of June 7, 1999, Montgomery Watson conducted quarterly groundwater sampling at the American Chemical Services (ACS) Site. Three Montgomery Watson field sampling crew were assembled to collect samples from monitoring wells within the ACS site boundary, the wetland area, the City of Griffith Landfill, and the areas that lie north, south, and east of the ACS facility. BVSPC's one-man crew conducted oversight of the field activities. A BVSPC representative accompanied the sampling team to ensure that proper sampling techniques were conducted. The specified operating procedure (SOP) for low flow groundwater sampling was adhered to by the sampling team. The BVSPC representative was tasked to collect split samples if the sampling technique differed from the SOP. BVSPC oversaw Montgomery Watson's sample paperwork procedures and decontamination set-up and routine.

Montgomery Watson collected 52 groundwater samples, and duplicate samples, matrix spike/matrix spike duplicate (MS/MSD) samples, and field equipment rinsate blanks. Of the 52 groundwater samples, 44 were required by the USEPA and the other 8 were collected for biological parameters to monitor natural attenuation. The monitoring wells sampled by

Montgomery Watson are listed in the field logbook notes, which are attached to this report.

Montgomery Watson used the low flow sampling technique and monitored for stability of the following groundwater parameters: pH, specific conductance, and temperature. Groundwater turbidity was also monitored and samples were collected when three consecutive parameter readings were within 10 percent of the previous readings.

Five equipment rinsate blank were collected by Montgomery Watson to ensure that proper decontamination procedures yielded clean sampling equipment.

BVSPC noted problems with the dedicated tubing used to pump and sample. The tubing was difficult to handle. Numerous kinks were created that hindered flow. BVSPC recognizes dedicated tubing is an improvement over non-dedicated tubing and would suggest taking the next step with dedicated pumps.

Signature: Chad Gailey

Date: June 17, 1999

(44)

Check Daily 05/29/79

14:15

WATER is clear in line  
but in bucket it has Dark Gray  
color.

Temp pH Cond DO Turb ORP

14:33 11.98 8.17 942 155 6.2 129

Final WATER Parameters

MWGR.

14:35 Picture John Noyes Sampling near GR

Jobs in Picture Log Pg 38

14:45 Finish Sampling DIBS TO WTB.

16:00 Pulling Field Blank

16:05 John Noyes, Picture of John adjusting  
control During Field Blank

Picture info is on Pg 38 Picture Log.

16:15 Sampling is Done, Picking up  
equipment Such as Bottles, Preservatives,  
Coolers. MW is cleaning Packing  
Sample plus Equipment to Return  
to Renters and their office.

Check Daily

(45)

Check Daily 06/07/79

8:30

ARRIVED ON SITE, Weather, A SUNNY  
77°F going up to 90°F light  
BREEZE

Present from MW ARE as follows

JENNIFER Smith

ROBERT ADAMS

Dawn Dought

Scott SHERMAN

SATJAD ANANI

JUDITH KINCA

TALK WITH JENNIFER AND JUDITH, TODAY  
WILL BE WATER LEVELS.

JENNIFER IS IN THE PLANT AREA

ROBERT IS IN WET LANDS

Dawn IS IN THE LAND FILL AREA

Scott IS IN THE AREA OF ORC

North South of RR Track

SATJAD IS IN Residential an

West Woods

Judith IS IN the Farmer Field

8:45 Prep For Sampling Bottles, Tag, etc.

Plan Split SAMPLES ARE AS

FOLLOWS, OR ONES TO WATCH.

Check Daily

(46)

Check Log 06/07/99

09:30

MW10C

M45

MW45

MW9D

MW51

MW4D

MW18

MW6

MW48

M15

ATMW4D

These ARE SHALE LOCATION collect  
in the Past, location of concern.

9:45 Talk with the SURVEYOR DAVID WIL  
He is out SURVEYING in the new  
ORC wells.

10:15 Talk with SAJJAD, He was taking  
well measure, was having a rough time  
find wells, FIRST TIME on site.

10:35 Talk to Dawn @ M55+D. She  
FOUND STAFF WATER TO IS HOLE  
Dawn will have to get WADERS to  
MEASUREMENT.

11:25 Talk To Scott BACK @ the WATER  
TREATMENT Bld.

12:00 Lunch

12:40 BACK FROM Lunch Judith + Scott went  
to get the ATV, Jennifer and Rob pick up  
the Generator, MEET @ (WTB).

Check Log

(47)

Check Log

06/07/99

14:15

Pickup Supplies at MENARDS  
Vermiculite for Packing

14:45

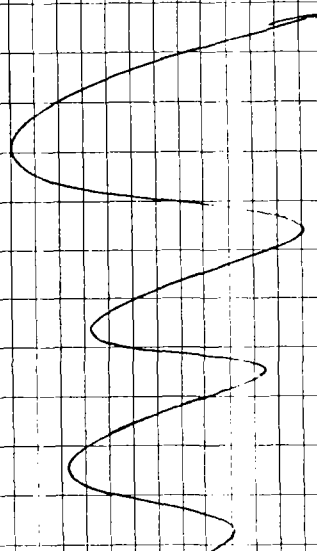
Return to WATER TREATMENT Bld.

15:15

Show Down location of Residential  
wells on Reeder Rd.

15:45

Walk the outside of off site  
FENCE in AREA looks ok  
ONE piles ARE UNCOVERED,  
Several Run OFF DRAINAGE CONTROLS -  
LOVE FOR HOME OFFICE



Check Log

(48)

Chad C. Taylor 06/08/99

7:15

Arrived ON site everyone is present  
from previous list 06/07/99.Weather A Sunny 74°F going for 92°F  
Light breeze to No Breeze.

Sampling Groups ARE AS follows:

① Jennifer + Setjad

② Judith + Scott

③ Rob + Dawn

I will Follow Group # 2 Today  
Judith + Scott.

\* NOTE Picture log is ON Pg 60.

08:05 Rob + Dawn ARE going BACK to  
the Landfill to complete ground-  
WATER MEASUREMENTS.

Scott IS GETTING ICE.

Preping Bottles AND WAITING FOR  
Fac EX TO DELIVER Hydro Labs  
TO TAKE PARAMETERS.8:30 Judith informed me that that  
they would not get the Hydro  
Lab or send out if there coming  
until 9:00.9:30 Going to get the Hydro Lab Tomorrow  
before 08:00, going to prep for  
tomorrow. THANKS TO THE PEOPLE

Chad C. Taylor

(49)

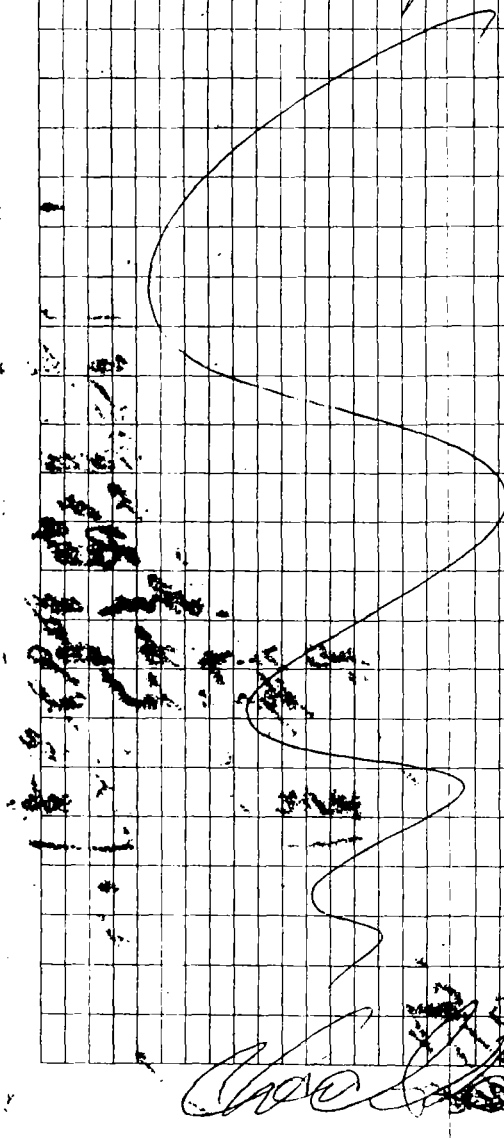
Chad C. Taylor 06/08/99

10:00

Decomposing Plumps + mixing  
New Decon WATER.

11:13

Complete prep.



Chad C. Taylor

④

06/09/79 *Chad S. Long*

06:30 ARRIVED ON SITE, WEATHER  
PARTLY CLOUDY 77°F ON WAY TO 90°F.  
VERDIE BREEZE.

08:15 Judith Called Hydro Lab to check  
ON EQUIPMENT ARRIVAL, Fedex does  
NOT HAVE BEFORE 8:00 AM DELIVERY TO  
ACS, SO IT WILL COME WITH THE 10:00  
DELIVERY. ON STAND BY.

8:35 RECEIVED A COPY OF ALL THE  
WATER MEASUREMENTS

10:00 Hydro Lab Delivery was complete.  
They can now start sampling.  
A DISCUSSION ON SAMPLING PROCEDURE  
WAS TAKEN PLACE ON THE USE OF A  
VALVE. I COULD FIND NO REASON  
TO PREVENT THEM FROM ANY  
IT. THE VALVE ALLOWS THEM TO STOP  
THE FLOW TO THE HYDRO LAB AND  
TO COLLECT A SAMPLE WITH CONTROLLED  
FLOW RATE. THE VALVE IS POLYPROPYLENE  
WITH SILICONE.

Team 2 is sampling 38 + 39.

Team 1 is sampling 18 + 19.

Team 3 is sampling 48.

*Chad S. Long*

⑤

06/09/79 *Chad S. Long*

10:35 I have just reviewed the SOP  
with Judith Kinch from MW.  
The SOP only stipulates to collect  
the parameters.

This interface is on SOPE of MW  
GROUNDWATER MONITORING well sampling  
IT. Report. Low Flow Sampling rate  
Submersible pump.

map 1986

10:45 Talk to Michael Sanchez for  
Day Contact Phone #  
703 715 4814

10:50 Moving to: MW 38 + 39. Group #2

11:35 Setting up on MW 39.

11:40 Picture #2 of Scott + Judith installing  
the pump @ MW-39 FACING NORTH  
WEST.

11:55 Pumping well as DRAWDOWN IS BEING  
MEASURED TO ENSURE THERE IS NO  
DRAWDOWN.

12:20 WATER IS FAST COLORED, STILL TAKING  
PARAMETERS.

12:30 Start Sampling this is A Bio  
chemical well.

*Chad S. Long*



⑥

Chad Lake 06/01/89

12:25 Picture #3 of Judith Lilling  
AVOA HOTEL @ MW-39, FACING  
NORTHWEST, THIS IS A BIOLOGICAL WELL.

13:00 FINISH SAMPLING MDSig to  
MW-39.

13:30 GET BACK TO WATER TREATMENT Bldg  
with Group 2 for Equipment

14:20 Pumping MW-39. TAKING PARAMETERS  
MEASURING DRAW DOWN.

Purge Rate is AT 300 gal/min.

14:27 Picture #4 of Judith taking a WATER  
LEVEL MEASUREMENT CHECK Well Draw Down  
@ MW-38 FACING SOUTHEAST, THIS IS  
A BIOLOGICAL WELL.

14:35 Judith is checking Draw Down as she  
Also monitors. WATER Quality PARAMETERS  
MEASUREMENT 5.50 FT NO Draw Down  
WATER is CLEARING parameters initially  
A LITE RUST COLOR

15:10 Still Pumping well Turbidity is Dropping

15:20 Sample Time

Final Parameter @ MW-39

Vol Temp DO BOD Turbidity Residue

5.0 16.32 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0

⑦

Chad Lake 06/01/89

15:40 Picture #5 of Scott & Judith  
filling out Labels @ MW-39 FACING  
Northwest, This Bio well.

15:56 DE FINISHED SAMPLING, DECONING  
Pump in the Field, IT HAS  
Just began to Rain & Lightning.

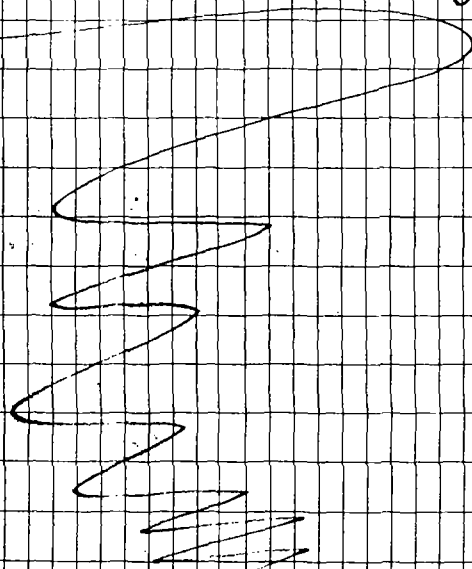
16:10 Return to WATER TREATMENT Bldg

16:10 GET BACK AND PREP.

16:20 Judith & Sergio may try to Sample MW

16:20 ADDITIONAL WELL

17:40 Weather Looks worse, Not Going out.



Chad Lake

(64)

Chad Soley October 1999

- 6:40 ARRIVED ON SITE. Present is Rob Jennifer. The other gelly Supplies.  
Weather Sunny 74°F on way to 90°F Humidity 80% Light BREEZE. —
- 7:30 Group 1 Jennifer + Satjad are going to Sample MW-50, MW-19 AT MW-10 (Inside Plant), MW-12
- Group 3 Rob + Dawn MW-32, MW-31 MW-08
- Group 2 Judith + Scott MW-41 + MW-45 in Farns fields.
- I will Follow Group 1 Jennifer + Satjad First.
- 7:55 Group 1 Jennifer + Satjad Setting up ON MW-50.
- 08:08 PICTURE #6 of Jennifer + Satjad installing the pump Down the well @ MW-50 Facing Northeast, This well is a full Parameter well.
- NOTE the well was OPEN ON ALLIG.
- 08:15 Pumping WATER, Color is Light Grey This is A Deep well.
- 08:20 TESTING FOR Draw Down well measurement is 25.80 FT Depth to water

Chad Soley

(65)

Chad Soley 06/10/99

- 08:35 Depth to WATER 25.8. purge about 3 gallons. No observed Draw Down.
- 08:45 25.80 Depth to water No Draw Down.
- 09:24 FINAL PARAMETERS for MW-50
- | Temp | DO  | SpC | Turb | PH   | Red |
|------|-----|-----|------|------|-----|
| 16.3 | 1.6 | 2.6 | 510  | 7.42 | 408 |
- 09:30 START Sampling.
- 09:35 Picture #7 of Jennifer filling VOA Bottle @ MW-50. Facing Northeast.
- All SOP's were followed. The only problem was the kinks in the Top of the Deadhead Tubings.
- 09:57 JENNIFER + Satjad FINISHED Sampling MW-50
- 10:10 Moving to MW19
- 10:20 Installing the Pump at MW-19. Jennifer + Satjad.
- 10:36 START Pumping well MW-19. Depth to WATER 3.0 ft.
- 10:45 Depth to water 3.0 ft No Visible Draw Down WATER is A Light Grey.
- 10:50 PICTURE #8 of SATJAD TAKING Parameters with A hydrolab @ MW-19 facing Southwest,
- 11:09 Visited Rob + Dawn at a Nest OF WELLS MW-32-31 + MW-08. They were in the process of Decoupling the

Chad Soley

(48)

Chad Lacy 06/10/99

10:09 Pump and tubing on their way to sample can't  
 mwo8. Dawn + Rob have completed  
 mwo32 AND mwo31.

11:15 Return to Jennifer AND Satjad.

Started Sampling mwo19.

11:22 Picture #9 of Satjad Filling an  
 Amber Bottle @ mwo19. Facing South  
 west.

12:05 Finish Sampling, Now Pecanvine  
 Pump, Tubing.

12:20 Judith + Scott ARE just coming  
 out of the Farm fields. stopped  
 to Ask them which well they ARE  
 going to next.  
 They ARE going to Return to mwo38 + 35  
 in the Farm field.

12:36 Rob + Dawn ARE finishing mwo8

13:20 Jennifer + Satjad ARE just starting  
 at mwo12 this well is in side ACS Locality  
 Fence.

13:40 Return to WATER TREATMENT Bldg  
 Got something to eat.

14:00 Setting up on mwo54 with Rob  
 + Dawn.

Chad Lacy

(49)

Chad Lacy 06/10/99

14:15 Purging well, WATER color is  
 DARK GRAY.

14:20 Depth to water on mwo54 is 14.7

14:30 Depth to water 14.7. No Draw Down  
 observed.

15:15 Final Parameters @ mwo54

Gal	Temp	DO	Cond	pH	ORP	Turb.
54	14.48	00	1227	7.46	28	100

Last 3 readings within 10%.

15:17 Removed Hydrostat Start Sampling

15:20 Picture #10 of Dawn filling a VOA  
 bottle @ mwo54 facing EAST.

15:30 Picture #11 of Dawn Rob Pulling the  
 Pump out of mwo54.

15:40 Person pump.

15:45 moving on to mwo05 in the sand  
 Nest.

16:00 Funnell Jennifer AND Satjad @ mwo12  
 setting up.

16:20 Check on Judith and Scott @  
 mwo44 they ARE just starting.

16:43. Leaving. The group ARE going to complete  
 the wells there and then Pack collect  
 a day.

Chad Lacy

(4)

Chad Lacey 06/11/99

7:00

ARRIVED on site, everyone present.  
Weather 71°F cloudy to 70°F + Light BREEZE  
Humidity 85% or 60% chance of Rain.  
Julith told me they will be sampling  
Next week also to finish.

07:40

Jennifer + Satjad ARE going to the final fill  
Julith Scott ARE going to MW-43  
+ 47 in the farm field then into the  
Swamp.

Rob + Dawn ARE going to MW-33  
MW-33.

07:53

Jennifer + Satjad are setting up on  
M4D This will be for indicator parameter  
only. Then M4S will be next for full scene.

08:12

Pumping M4D. Testing Draw Down.  
Depth to WATER 10.20

8:33

Depth to WATER 10.30 No water  
Draw Down observed.

8:56

Final Parameter @ M4D last 3 readings  
are within 10%

Temp	%DO	SpL	Turb	pH	ORP
16.36	4.5	1333	10	7.51	535

8:55

Picture #12 @ M4D of Satjad  
installing a Poly, facing South

Chad Lacey

(5)

Chad Lacey 06/11/99

9:10

Picture #13 of Satjad Decoding the  
pump @ M4D + M4S, facing South west  
Note that is M4S.

M4D + M4S ARE NEXT of wells.

9:20

Going to check on Rob + Dawn.

10:00

Found Rob + Dawn Look for survey  
in at MW24. Rob said the ATV  
will have to do this well. Rob + Dawn  
Refer to WTS for different labels  
for MW-33 + 31.

10:20

Found Julith + Scott Pumping MW 47

Depth to WATER @ MW47 6.63 No Draw Down

10:41

Still Taking Parameter close to stabilizing

10:50

START Sampling this is at MS/MSD  
@ MW47

11:50

Finish Sampling

12:25

Moving to Water Treatment Bldg

12:30

Lunch

13:00

Moving to MW24 After calling  
in time sheets

14:02

Setting up on MW-33 Rob + Dawn

14:10

Decoding Pump

14:23

Picture #14 of Dawn + Rob Installing  
the pump @ MW-33, facing Northwest

Chad Lacey

60  
6/10/99

Chad Log

Picture Log

- 11:40 Picture #2 of Scott & Judith  
INSTALLING the Pump @ MW-39  
FACING Northwest, in the woods.
- 12:25 Picture #3 of Judith filling  
A VOA bottle @ MW-39, Facing  
Northwest, This is a Biological well.  
Temp DO Conc Turb pH Redox  
14.89 7.5 456 24.2 645 211 1.9  
Hydro LAB was Disconnected Before  
sampling Took place. All SOP  
sampling procedures were followed @  
this well.
- 14:27 Picture #4 of Judith taking a  
WATER MEASUREMENT CHECK well Drawdown  
@ MW-38 Facing South East, This is  
a Biological well.
- 15:40 Picture #5 of Scott & Judith filling  
out labels @ MW-39 Facing Northwest  
This is a Bio well.
- 06/10/99 Picture #6 of Jennifer & Satjad installing  
The pump Down the well @ MW-50 FACING  
Northeast, This well is analyzed full parameters.
- 0935 Picture #7 of Jennifer filling a VOA Bottle  
@ MW-50, Facing Northeast.

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Picture Log Chad Log

- 10:50 Picture #8 of SATJAD Taking PARAMETERS  
with Hydro Lab @ MW-19, Facing Southwest.
- 11:20 Picture #9 of SATJAD Filling an Amber  
Bottle @ MW-19 Facing Southwest.
- 15:20 Picture #10 of Dawn filling a VOA  
Bottle @ MW-54, Facing East (CL well)
- 15:30 Picture #11 of Dawn & Rob Pulling the pump  
out of MW-54, Facing EAST.
- 06/10/99 8:55 Picture #12 of Satjad filling a poly  
@ M4D, Facing South.  
This well does not have dedicated tubing.
- 9:10 Picture #13 of Satjad Disconnecting the pump  
and tubing @ M4D + M4S, Facing South  
west. Note Next is M4S
- 14:20 Picture #14 of Dawn & Rob installing the  
Pump @ MW-33, Facing Northwest
- 15:00 Picture #15 @ MW-35 of Dawn filling  
VOA Bottles, Facing Northeast.
- 15:10 Finished Sampling M4S MW07  
Disconnect @ MW07.
- 15:29 Visited Jennifer & Satjad @ MW-07  
There were preconnections to MW-13.

Chad Log

62

# Picture Log

- 11:15 Picture #16 of Judith Decanning the pump in front of the WTS  
Facing Southwest
- 11:30 Picture #17 of Judith + Trisha Decanning the pump + tubing inside the water treatment cell
- 15:50 Picture #18 of Judith + Trisha Pulling the pump out of MW07, Facing South
- 17:25 Picture #19 of Dawn Pilling VOA Bottles @ MW-11, Facing Northeast
- 09:03 Picture #20 of Judith Labeling Bottles @ MW-13, Facing West
- 09:40 Picture #21 of Trisha Decanning the pump near MW-53, Facing North
- 13:05 Picture #22 of Jennifer hooking up HydroLab @ MW-29, Facing Northwest
- 14:07 Picture #23 of Jennifer Pilling a VOA @ MW-29, Facing Northwest

Cheryl Lutz

63

# Cheryl Lutz 06/11/99

- 14:25 Depth to WATE @ MW-33 is 11.67
- 14:59 Depth to water @ MW-33 is 11.67
- NO OBSERVED Draw Down
- 14:49 Final Parameter @ MW-33 there is the last pumping last 3 with a 10%
- Vol Temp conc pH Redox Turb DO
- 34 1499 2337 6.71 102 88 .42
- 15:00 STOP Sampling @ MW-33
- 15:00 Picture #15 @ MW-33 of Dawn Pilling VOA Bottles, Facing North-east
- 15:10 Finished Sampling moving to MW07 Rob + Dawn
- 15:27 Visited Jennifer + Satjad @ MW24 They ARE just FINISHING, MOB to MW-11, First Return the MTB
- 3:44 A THUNDER STORM is blowing, the sky is dark with streaks of lightning Present at MTB ARE Satjad, Dawn, Jennifer Rob, Judith + Scott are in the Swamp
- 4:15 The Groups ARE not taking any more Samples today. They ARE Pack + Preparing for Monday

Cheryl Lutz

64

Chad Salas

06/14/79

ARRIVED

09:45

ARRIVED. Weather OVER CAST

69°F Light BREEZE

Water TREATMENT Bld had  
A little water Problem. Lee  
was Pumping water off the floor  
BECAUSE OF Plugged line, the  
OVER Flow Valve went off.

Present is Dawn + Scott Group  
1, Group 2 is Judith + Trisha.

10:15

Pumping P22 ORC well, Group 1  
Dawn Scott. They ARE having a  
Siltup Problem.

The well is AN ORC well, Dawn, Scott  
ARE going to get a nother pump.  
I'm going back with Judith  
to here well. MW-37

10:40

ARRIVED @ MW-37, currently  
Sampling.

3rd IBE Field Instruments.

412 271 2548

10:50

Went Back to Dawn SCOTT  
to see if Pump was work.  
WORKING FINE

Chad Salas

65

Chad Salas 06/14/79

11:15

Picture #16 of Judith Decann  
the pump in front of the  
WATER TREATMENT Bld Facing  
South west.

Preping for MW-23

11:40

Setting up on MW-23

11:55

Start Pumping

12:45

Start Sampling

13:15

Finish Sampling

13:30

lunch

14:15

Moving to MW07 is Judith  
+ Trisha

14:20

Moving to MW06 after Terry on  
ORC well.

14:30

Picture #17 of Judith and Trisha  
Decann the pump + taking picture  
the Water Treatment Bld.

14:50

Pumping ORC P24

15:25

Pumping ORC P24 Dawn + Scott  
I'm going to check on Judith Trisha  
at MW 07

15:35

Judith Trisha are pumping

15:37

Start Sampling MW07  
This is for increasing Parameters.

Chad Salas



(60)

Chuck Seely 06/14/99

15:50 Trisha + Judith pulling Pump out  
of mwoz.  
Picture # 18 of Trisha +  
Judith

pulling out pump at mwoz,  
Facing South.

16:20 moving back to water treatment  
Building to Decore + Pickup  
Bottle then on to mwo-24  
for Judith + Trisha.

16:34 Dawn + Scott moving to mwo-11

16:40 Decoring Pump @ mwo-11 by Dawn  
AND Scott

16:50 Pumping mwo-11 Depth to  
Rabate 5.99 by Scott +  
Dawn water is just color.

17:21 Start Sampling, Final Parameter  
Last 5 are within 10% —

Temp conc pH Pectin TSS DO V<sub>50</sub>

15.63 2422 6.24 278 15.7 0.82 32

17:25 Peter # 19 of David Pilling VOA's  
at mwo-11 Facing North East

17:30 Lunch Sample and Decore Pump  
Moving to Water Treatment  
Bld

Chuck Seely

(61)

Chuck Seely 06/14/99

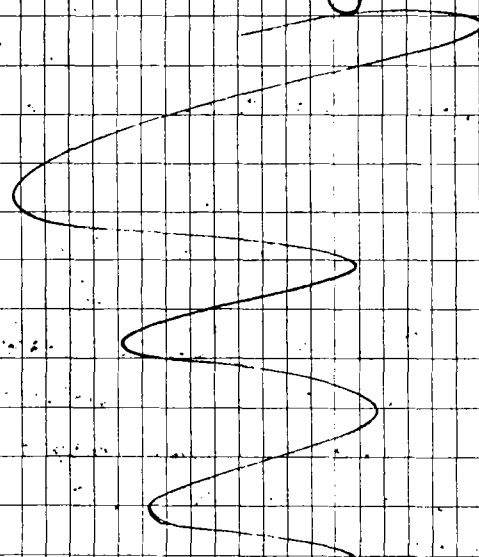
17:45 met up with Judith AND  
Trisha @ mwo-24. They are  
Pumping and check Draw Down.  
This well is for A Full STAGE.

17:50 Start Sampling

18:00 Finish Sampling, pack up mob  
to water treatment Bld Judith  
+ Trisha

18:45 Preparing for Tomorrow 10 well Left  
plus 8 ORC wells

19:00 Leave for day



Chuck Seely



⑥② Chad Saly 06/15/99

6:30 ARRIVED ON SITE Present Joeloth and myself, Trisha.  
Weather 58°F Sunny light Breeze.

6:45 Trisha + Joeloth ARE Filling a Field Blank inside the water treatment Bld.

7:00 Jennifer and Scott ARRIVE.

7:30 Joeloth + Trisha moving to MW-53

7:35 Jennifer + Scott moving to MW-06

08:05 Joeloth + Trisha ARE Pumping MW-13.  
MW-53 is further DOWN.  
Depth to water 3.68 @ MW-13

8:15 Depth to water 3.68 @ MW-13  
Stabilized No observed Draw Down.

9:00 Sample Time @ MW-13  
Parameters are within 10% for the last three Readings.

9:03 Picture #20 of Joeloth Labeling Bottles, @ MW-13 facing west.

9:30 Finish Sampling the wells  
A Duplicate @ MW-13.  
Moving to MW-53

9:40 Picture #21 of Trisha Decanning the pump near MW-53, facing North

Chad Saly

⑥③ Chad Saly 06/15/99

10:00 Pumping water MW-53, Depth to water is 10.35 ft, NO observed Draw Down.

10:20 Depth to water 10.35 No observed Draw Down.

11:00 START Sampling @ MW-35  
Last 3 PARAMETERS ARE within 10% of each other.

11:10 Finish Sampling MW-35, moving to MW-52

11:20 Pumping well

11:30 No Observe WATER Depth. No observed Draw Down.

12:00 START Sampling

12:20 Finish Sampling MW-52

12:35 Pick up mob to water treatment Bld to get MORE bottles for Joeloth + Trisha.

12:55 Jennifer + Scott ARE moving to MW-9R, and MW-29. I will observe the this After Noon.  
Joeloth + Trisha ARE moving to MW-49.

1305 Picture #22 of Jennifer hooking up the Hydro lab @ MW-29, Facing Northwest.

Chad Saly

(64)

Cheryl Soley 06/15/99

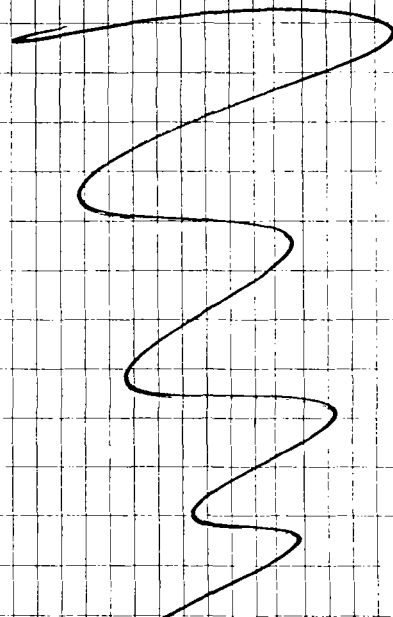
- 13:09 Depth to water @ MW-29 15.00 ft  
 13:15 Depth to water @ MW-29 15.00 ft  
 No Observed Draw Down.  
 13:20 Depth to water @ MW-29 15.00 ft  
 14:02 Start Sampling @ MW-29  
 Last 3 parameters ARE within  
 10%  
 14:07 Picture #23 of Jennifer Silling  
 & VOA @ MW-29, facing  
 North west  
 14:36 Finish Sampling, mob to MW9R  
 AND Decoding Pump Jennifer & Scott.  
 14:40 Setting up on MW9R  
 14:43 Start Pumping MW9R  
 14:48 Depth to water 16.24 ft  
 15:15 Depth to water 16.24 ft  
 No observed Draw Down.  
 15:30 START Sampling MW9R this is  
 MS/MSD  
 15:35 Picture #24 of Jennifer & Scott  
 Silling, VOA @ MW9R, facing  
 North west  
 16:10 Trisha & Judith setting up on MAWOC  
 Scott & Jennifer ARE Picking Samples

Cheryl Soley

(65)

Cheryl Soley 06/15/99

- 16:30 MW10C Conclude the ACS  
 June Sampling Event, All  
 Sampling Teams followed the SOP.  
 44 Groundwater Samples were taken  
 5 Duplicates  
 3 MS/MSD  
 6 Field Blanks  
 8 ORC wells  
 Note one of the Duplicates was  
 FOR Bio parameters.



Cheryl Soley



Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:2  
 Date: 06-09-99 Time: 11:40  
 Photographer: Chad Gailey  
 Description: Photo facing northwest at MW-39  
 of Scott Sherman and Judith  
 Kinch installing the low flow  
 pump at MW-39



Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:3  
 Date: 06-09-99 Time: 12.25  
 Photographer: Chad Gailey  
 Description: Photo facing northwest at MW-39  
 of Judith Kinch filling a 40ml  
 VOA bottle.





Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 4

Date: 06-09-99 Time: 14:27

Photographer: Chad Gailey

Description: Photo facing southeast at MW-38 of Judith Kinch taking a water measurement to check well draw down.

Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 5

Date: 06-09-99 Time: 15:40

Photographer: Chad Gailey

Description: Photo facing northwest at MW-39 of Judith Kinch filling out labels for sample bottles.





Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 6

Date: 06-10-99 Time: 08:08

Photographer: Chad Gailey

Description: Photo facing northeast at MW-50 of Jennifer Smith and Satjad Ansari installing the low flow pump in MW-50.



Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 7

Date: 06-10-99 Time: 09:35

Photographer: Chad Gailey

Description: Photo facing northeast at MW-50 of Jennifer Smith filling a VOA bottle at MW-50.





Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #:8

Date: 06-10-99 Time: 10:50

Photographer: Chad Gailey

Description: Photo facing southwest at MW-19 of Satjad Ansari taking parameters with a hydrolab to measure water quality.

Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 9

Date: 06-10-99 Time: 11:22

Photographer: Chad Gailey

Description: Photo facing southwest at MW-19 of Satjad Ansari filling an amber bottle for PAH's/Phenols.





Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 10

Date: 06-10-99 Time: 15:20

Photographer: Chad Gailey

Description: Photo facing east at MW-54 of  
Dawn Daugher and Rob Adams  
filling VOA bottles.



Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 11

Date: 06-10-99 Time: 15:30

Photographer: Chad Gailey

Description: Photo facing east at MW-54 of  
Dawn Daugher and Rob Adams  
pulling the low flow pump out of  
MW-54.





Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #: 12  
 Date: 06-11-99 Time: 08:55  
 Photographer: Chad Gailey  
 Description: Photo facing south at M4D of  
 Satjad Ansari filling a poly for  
 RCRA metals.

Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #: 13  
 Date: 06-11-99 Time: 09:10  
 Photographer: Chad Gailey  
 Description: Photo facing northwest at M4D of  
 Satjad Ansari Deconning the  
 pump and tubing for M4S.





Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 14

Date: 06-11-99 Time: 14:20

Photographer: Chad Gailey

Description: Photo facing north west at MW-33 of Dawn Daugher and Rob Adams installing the pump in MW-33.



Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #: 15

Date: 06-11-99 Time: 15:00

Photographer: Chad Gailey

Description: Photo facing northeast at MW-35 of Dawn Daugher filling a 40ml VOA bottle.





Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:16  
 Date: 06-14-99 Time: 11:15  
 Photographer: Chad Gailey  
 Description: Photo facing southwest of Judith  
 Kinch deconning the low flow  
 pump and tubing in fount of the  
 water treatment building.

Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:17  
 Date: 06-14-99 Time: 14:30  
 Photographer: Chad Gailey  
 Description: Photo facing south inside the  
 water treatment building  
 deconning the low flow pump and  
 tubing for MW-07.





Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:18  
 Date: 06-14-99 Time: 15:50  
 Photographer: Chad Gailey  
 Description: Photo facing south of Judith  
 Kinch and Trisha Woolslayer  
 pulling the low flow pump out of  
 MW-07.



Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:19  
 Date: 06-14-99 Time: 17:25  
 Photographer: Chad Gailey  
 Description: Photo facing northeast of Dawn  
 Daugher filling a VOA bottle.





Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #:20

Date: 06-15-99 Time: 09:03

Photographer: Chad Gailey

Description: Photo facing west at MW-13 of  
Judith Kinch labeling bottles for  
MW-13.

Site: American Chemical Services, Inc.

Proj. #: 46517/46518

Roll: 1 Photo #:21

Date: 06-15-99 Time: 09:40

Photographer: Chad Gailey

Description: Photo facing north of Trisha  
Woolslayer deconning the low  
flow pump near MW-53 for MW-  
52.





Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:22  
 Date: 06-15-99 Time: 13.05  
 Photographer: Chad Gailey  
 Description: Photo facing northwest at MW-29  
 of Jennifer Smith hooking up the  
 Hydrolab to take water quality  
 parameters.



Site: American Chemical Services, Inc.  
 Proj. #: 46517/46518  
 Roll: 1 Photo #:23  
 Date: 06-15-99 Time: 14:07  
 Photographer: Chad Gailey  
 Description: Photo facing northwest at MW-29  
 of Jennifer Smith filling a VOA  
 bottle.



Site: American Chemical Services, Inc.  
Proj. #: 46517/46518  
Roll: 1 Photo #:24  
Date: 06-15-99 Time: 15:35  
Photographer: Chad Gailey  
Description: Photo facing northeast at MW9R  
of Jennifer Smith and Scott  
Sherman filling VOAs.